

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Previously Presented) A method of producing a tool component including the steps of: (1) providing a plurality of fibres, each fibre having a core comprising a mass of ultra-hard abrasive particles or precursor to said ultra-hard abrasive particles and optionally a second phase, and a coating comprising a mixture of carbide particles and particulate binder metal, (2) producing a bundle of the fibres, (3) severing the bundle transverse to its length to produce a layer, (4) placing the layer on a surface of a substrate to produce a green state product, and (5) subjecting the layer and substrate to elevated temperature and pressure conditions at which the ultra-hard abrasive particles are crystallographically stable to produce an abrasive compact of the ultra-hard abrasive particles.

2. (Original) A method according to claim 1, wherein the bundle of fibres is extruded prior to being severed to produce the layer.

3. (Previously Presented) A method according to claim 1, wherein the core further comprises an organic binder and wherein the core comprises a mixture of diamond or cubic boron nitride particles and an appropriate solvent/catalyst, in particulate form, bonded into a coherent mass form by means of an organic binder.

4. (Previously Presented) A method according to claim 1, wherein the coating further comprises an organic binder which bonds the mixture of carbide particles and particulate metal binder into a coherent form.

5. (Previously Presented) A method according to claim 1, wherein the carbide particles are tungsten carbide particles, tantalum carbide particles or molybdenum carbide particles.

6. (Previously Presented) A method according to claim 1, wherein the substrate is a cemented carbide substrate.

7. (Previously Presented) A method according to claim 1, wherein the coating comprises one or more layers.

8. (Original) A method according to claim 7, wherein the coating comprises more than one layer, each layer differing from an adjacent layer in physical and/or chemical properties.

9. (Original) A method according to claim 8, wherein one layer has coarser or finer carbide particles than the adjacent layer (s) or contains a different metal binder to that in the adjacent layer (s).

10. (Previously Presented) A method according to claim 1, wherein the tool component comprising the substrate has a working portion produced from the layer bonded to a surface thereof.

11. (Original) A method according to claim 10, wherein the working portion comprises a composite material comprising essentially a honeycomb structure of cemented carbide and abrasive compact material within the pores of the honeycomb structure and bonded to the honeycomb structure.

12. (Original) A method according to claim 11, wherein the pores of the honeycomb structure are ordered or random.

13. (Currently Amended) A method of producing a tool component including the steps of: (1) providing a plurality of fibres, each fibre having a core comprising a mixture of carbide particles and particulate binder metal, and a coating comprising a mass of ultra-hard abrasive particles or precursor to said ultra-hard abrasive particles and optionally a second phase, (2) producing a bundle of the fibres, (3) severing the bundle transverse to its length to ~~produce~~ produce a layer, (4) placing the layer on a surface of a substrate to produce a green state product, and (5) subjecting the layer and substrate to elevated temperature and pressure conditions at which the ultra-hard abrasive particles are crystallographically stable to produce an abrasive compact of the ultra-hard abrasive particles.